PROPOSED USE OF THE PLENARY POWERS TO VARY THE TYPE SPECIES OF THE GENUS "CHELONICERAS" HYATT, 1903 (CLASS CEPHALOPODA, ORDER AMMONOIDEA), IN ORDER TO VALIDATE EXISTING NOMENCLATORIAL PRACTICE

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The object of the present application is to seek the help of the International Commission on Zoological Nomenclature in stabilising the nomenclature of the genus *Cheloniceras* Hyatt, 1903. It is hoped that the Commission will be able to give early consideration to this case since a decision is required in connection with the preparation of the *Treatise on Invertebrate Palaeontology.*

2. The generic name *Cheloniceras* was published in 1903 in "*Pseudoceratites of the Cretaceous,*" a posthumous monograph of A. Hyatt edited by T. W. Stanton. It was introduced in an editorial footnote (Hyatt, 1903 : 101), which reads as follows :—

> "In the manuscript a sheet is inserted just before *Vascoceras* with the heading 'Cosmoceratida,' followed by 'In family description notice resemblance of form to Aspidoc. of Jura as more remote than to *Cheloniceras* of the Cretacic.' Another memorandum bears pencil-sketch copies of d'Orbigny's figures of *Ammonites royerianus* (Pal. Fr. Terr. Crét., 1, pl. 112, figs. 3, 4) labeled *Cheloniceras royerianus*, indicating that he had probably selected this species as the type of a new genus. . . . T.W.S."

3. Notwithstanding the somewhat unusual circumstances of its introduction, the nominal genus *Cheloniceras*, with authorship credited to Hyatt and with *Ammonites royerianus* d'Orbigny (1841, *Paléont. française*, Terr. crét. **1** Céphalopodes : 365, pl. 112, figs. 3-5) as type-species, has since been universally accepted by ammonite specialists (e.g. Spath, 1921 : 316 ; Roman, 1938 : 426 ; Humphrey, 1949 : 143). It has come to occupy an important position in Cretaceous ammonitology and has formed the base of the family name CHELONICERATIDAE (Spath, 1923 : 35). Nomenclatorial stability of the genus is threatened, however, by inability to assess satisfactorily the taxonomic characters of its type-species.

4. D'Orbigny's holograph of *Ammonites royerianus* illustrates an immature ammonite from the Aptian of Bailly-aux-Forge, Wassy (Haute-Marne), France, which is stated (Orbigny, 1841 : 365-6) to be 12 mm. in diameter and to be represented in natural size. As noted by Stoyanow (1949 : 104), however, the illustration is of 20 mm. diameter. In any case, the specimen is too immature for positive determination below family level, and authors have been obliged to base their conception of *Cheloniceras* on such species as *A. cornuelianus* d'Orbigny, 1841 (*Paléont. française*, Terr. crét. **1** Céphalopodes : 364, pl. 112, figs. 1-2) and *A. martini* d'Orbigny, of which there is abundant well-illustrated material. Kilian (1913 : 340) referred *A. royerianus* to the same group as *A. ricordeanus* d'Orbigny (now assigned to the genus *Megatyloceras* Humphrey, 1949, *Bull. geol. Soc. Amer.* **60** (No. 1) : 149), while Rodighiero (1922 : 63, 67, 69) even supposed it to belong to the genus *Astiericeras* Parona and Bonarelli (family ASTIERICERATIDAE). On the other hand, Nikchitch (1915 : 3, 4, 13, 50) asserted that *C. royerianum* is merely the young of *C. cornuelianum*, and supported this assertion by illustrations of the young stages of *C. cornuelianum*. Nikchitch's views have been discussed by Stoyanow (1949 : 104), who has pointed out that in this connection it is probably significant that the type-specimens of *A. royerianus* and *A. cornuelianus* were obtained from the same area and from the same stratigraphical horizon and that they were described in immediate succession by d'Orbigny and figured on the same plate. Although we think it very likely that *A. royerianus* is the young stage of a species of the *cornuelianum* group, we do not consider its reference to *C. cornuelianum* to be beyond doubt. There are a number of allied species (e.g. *C. crassum* Spath and *C. kiliani* von Koenen) which are indistinguishable from *A. royerianus* and *A. cornuelianus* at 12 mm. diameter ; moreover, if d'Orbigny's type-specimen of *A. royerianus* is indeed 20 mm. in diameter it is not possible to exclude certain species of *Megatyloceras* as being congeneric. Hence the nomenclature of both *Cheloniceras* and *Megatyloceras* is insecure.

5. Our efforts to trace the original specimen (or specimens) on which the holograph of *A. royerianus* is based have been unsuccessful. In reply to our enquiries (through Mme. E. Basse de Ménorval), M. Sornay of the Muséum National d'Histoire Naturelle, wherein the d'Orbigny Collection is housed, has informed us (*in litt.* 18.7.52) that the d'Orbigny Collection now contains nothing which could have served as the basis for the illustration of *A. royerianus* and that all possible topotype specimens have been destroyed by decomposition. It is suggested that the specimen may have been returned to the Royer Collection, but the whereabouts of this Collection, if it still exists, is not known.

6. From the foregoing it is clear that doubt exists, and will always exist, as to the identity of the taxonomic species which is represented by the nominal species *Ammonites royerianus* d'Orbigny, and so long as this species remains the type species of the genus *Cheloniceras*, the nomenclature of that genus, of *Megatyloceras*, and of the family CHELONICERATIDAE rests upon an insecure basis. In order to remove this insecurity and to validate existing nomenclatorial practice in regard to the genus *Cheloniceras*, we ask the International Commission on Zoological Nomenclature :—

(1) to use its Plenary Powers :—

(*a*) to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy the specific name *royerianus* d'Orbigny, 1841, as published in the combination *Ammonites royerianus* (specific name of a *species dubium*) ;

(*b*) to set aside all selections of type-species for the genus *Cheloniceras* Hyatt, 1903, made prior to the proposed decision, and to designate *Ammonites cornuelianus* d'Orbigny, 1841, to be the type-species of the foregoing genus;

(2) to place the following generic names on the *Official List of Generic Names in Zoology* ;—

(*a*) *Cheloniceras* Hyatt, 1903 (type-species, by designation under the Plenary Powers, as proposed in (1) (*b*) above : *Ammonites cornuelianus* d'Orbigny, 1841) (gender of name : neuter) ;

(*b*) *Megatyloceras* Humphrey, 1949 (type-species by original designation : *Douvilleiceras coronatum* Rouchadzé, 1932, *Bull. Inst. géol. Géorgie* **1** (3) : 195, pl. 3, fig. 4 ; text-figs. 12, 13) (gender of name : neuter) ;

(3) to place the following specific names on the *Official List of Specific Names in Zoology* :—

(*a*) *cornuelianus* d'Orbigny, 1841, as published in the binominal combination *Ammonites cornuelianus* ;

(*b*) *coronatum* Rouchadzé, 1932, as published in the binominal combination *Douvilleiceras coronatum* ;

(4) to place on the *Official Index of Rejected and Invalid Specific Names in Zoology* the specific name *royerianus* d'Orbigny, 1841, as published in the binominal combination *Ammonites royerianus*, as proposed, under (1) (*a*) above, to be suppressed under the Plenary Powers.

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